

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**LISTING OF CLAIMS:**

Claim 1 (original) A scroll compressor in which a fixed scroll and an orbiting scroll whose scroll laps rise from an end plate are meshed with each other to form a compression chamber therebetween, and when said orbiting scroll is turned along a circular orbit while restraining rotation by a rotation-restricting mechanism, said compression chamber moves while changing its volume, thereby carrying out suction, compression and discharge operations, wherein

an outer wall curve of a scroll lap of said fixed scroll and an inner wall curve of a scroll lap of said orbiting scroll are formed of involute curves whose basic circle radius is defined as "a", an inner wall curve of said scroll lap of said fixed scroll and an outer wall curve of said scroll lap of said orbiting scroll are formed of involute curves whose basic circle radius is defined as "b", and a value of  $a/b$  which is a ratio of said basic circle radius  $a$  and said basic circle radius  $b$  is set to a value exceeding 1.0 and less than 1.5.

Claim 2 (original) The scroll compressor according to claim 1, wherein an involute angle  $\theta_a$  at which an inner wall curve of said scroll lap of said fixed scroll is terminated and an

U.S. Patent Application Serial No. 10/542,614  
Response to Office Action dated November 14, 2006

involute angle  $\theta_b$  at which an inner wall curve of said scroll lap of said orbiting scroll is terminated satisfy a relation of  $\theta_b < \theta_a < \theta_b + \pi$ .

Claim 3 (previously presented) The scroll compressor according to claim 2, wherein a center position of said basic circle radius a and a center position of said basic circle radius b are aligned with each other.

Claim 4 (previously presented) The scroll compressor according to claim 2, wherein a center position of said basic circle radius a and a center position of said basic circle radius b are separated from each other.

Claims 5-7 (canceled) .

Claim 8 (previously presented) The scroll compressor according to claim 1, wherein a refrigerant is a high pressure refrigerant.

Claim 9 (previously presented) The scroll compressor according to claim 8, wherein the refrigerant is carbon dioxide.

U.S. Patent Application Serial No. 10/542,614  
Response to Office Action dated November 14, 2006

Claim 10 (previously presented) The scroll compressor according to claim 2, wherein a refrigerant is a high pressure refrigerant.

Claim 11 (previously presented) The scroll compressor according to claim 10, wherein the refrigerant is carbon dioxide.

Claim 12 (previously presented) The scroll compressor according to claim 3, wherein a refrigerant is a high pressure refrigerant.

Claim 13 (previously presented) The scroll compressor according to claim 12, wherein the refrigerant is carbon dioxide.

Claim 14 (previously presented) The scroll compressor according to claim 4, wherein a refrigerant is a high pressure refrigerant.

Claim 15 (previously presented) The scroll compressor according to claim 14, wherein the refrigerant is carbon dioxide.

Claim 16 (previously presented) The scroll compressor according to claim 1, wherein a center position of said basic circle radius a and a center position of said basic circle radius b are

U.S. Patent Application Serial No. 10/542,614  
Response to Office Action dated November 14, 2006

aligned with each other.

Claim 17 (previously presented) The scroll compressor according to claim 1, wherein a center position of said basic circle radius a and a center position of said basic circle radius b are separated from each other.